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Register for the NMMSS 2015 Annual Users Training Meeting

The Nuclear Materials Management and Safeguards System (NMMSS) 2015 Annual Users Training Meeting will be held May 11–14, 2015, in Las Vegas, Nevada. There is no registration fee to participate in this invaluable learning opportunity. NMMSS is the U.S. Government's official information system containing current and historical accounting data and other related nuclear material information collected from both government and commercial nuclear facilities. The information serves a critical role in aiding risk-informed decision making in areas related to regulatory functions, international programs, materials management, program management, and financial management.

The NMMSS 2015 four-day event provides a unique training and information sharing opportunity for Nuclear Regulatory Commission (NRC) licensees, the Department of Energy (DOE)/National Nuclear Security Administration (NNSA) Federal and contractor organizations, and other domestic and international entities with responsibility for tracking and reporting nuclear materials.

The planned NMMSS 2015 agenda focuses on:

- Basic and specialized training to meet regulatory requirements associated with nuclear material reporting,
- Regulatory updates relevant to nuclear material reporting,
- Programmatic and regulatory issues of importance to the NRC licensees and DOE/NNSA contractors,
- Specialized breakout sessions,
- One-on-one consultations with, and technical support by, NMMSS staff, including a handson software orientation,
- Industry roundtable discussion to share ideas and identify opportunities for improvement, and
- Topical presentations on emerging domestic and international developments.

Take the NMMSS Challenge Exam!

This year, all participants are offered the opportunity to take the NMMSS challenge exam. The challenge exam is designed to test the basic knowledge and fundamental understanding of NMMSS reporting and requirements. The challenge exam is open to all participants. It begins at 4:30 p.m., right after the conclusion of the planned training sessions on Wednesday, May 13, 2015. The challenge exam is expected to consist of 20 multiple choice questions covering topics such as DOE and NRC Requirements, Forms and Instructions, Obligations Accounting, NRC/DOE Reconciliation, and IAEA Reporting.

NMMSS News is sponsored by the Department of Energy and the Nuclear Regulatory Commission.



Nevada National Security Site Tour- March 20, 2015 Deadline



NMMSS 2015 Annual Users Training Meeting participants have the opportunity of touring the Nevada National Security Site (NNSS), formerly known as the Nevada Test Site (NTS). The tour, which will be conducted by the DOE/NNSA Nevada Field Office on May 14, 2015, offers NMMSS training participants an exceptional learning adventure about the history, contribution, and legacy of the U.S. Government's nuclear materials program.

There is no cost to the NMMSS training participants for the tour and bus transportation. As this is an all-day event, \$15 per participant is requested to cover the cost of a box lunch and bottled water.

DOE/NNSA security requires specific forms to be completed by anyone who does not have a DOE/NNSA issued security clearance and active DOE/NNSA issued HSPD-12 credential. All forms

must be submitted by March 20th.

For more information and to register for this important event, including a draft agenda, please visit http://70.91.69.161/nmmss2015/. The venue for the 2015 NMMSS training is the Renaissance Las Vegas, 3400 Paradise Road, Las Vegas, Nevada. The rate for NMMSS training participants is \$92 per night. A limited block of rooms has been reserved at this rate on a first-come, first-served basis. Other hotels within walking distance include:

Residence Inn Las Vegas Convention Center (1 block away)

http://www.marriott.com/hotels/travel/lasnv-residence-inn-las-vegas-convention-center

Las Vegas Marriott (1 block away)

http://www.marriott.com/hotels/travel/lasst-las-vegas-marriott

Embassy Suites Convention Center Las Vegas (Same block)

http://www.lasvegasembassysuites.com

Meanwhile, please contact Pete Dessaules (DOE/NNSA) <u>Pete.Dessaules@NNSA.doe.gov</u> or Brian Horn (NRC) <u>Brian.Horn@NRC.gov</u> with any questions or topics of significance to your organization that you would like addressed at the NMMSS 2015 Annual Users Training Meeting.





A unique national resource, the Nevada National Security Site is a massive outdoor laboratory and national experimental center, offering visitors an experience that cannot be duplicated. Larger than the state of Rhode Island, approximately 1,375 square miles, the NNSS is one of the largest restricted-access areas in the United States. The remote site is surrounded by thousands of additional acres of land withdrawn from the public domain for use as a protected wildlife range and for a military gunnery range, creating an unpopulated land area comprising some 5,470 square miles.



NRC Reconciliation – Material Status Reports Are Due!

NRC regulations require licensees to report to NMMSS if they possess one gram or more of special nuclear material (SNM) (plutonium, uranium-233, or uranium-235 contained in enriched uranium) or one kilogram or more of foreign-obligated source material (natural uranium, depleted uranium, or thorium). Most NRC licensees report to NMMSS by calendar year. This means that after the New Year, the NMMSS program typically enters the busy season for NRC licensee reconciliations. In anticipation of a busy reporting period, below are some tips to help facilitate a smooth reconciliation. As always, NMMSS analysts are available to provide technical assistance by phone or email. Please see the Points of Contact at the end of this newsletter for a listing of the NMMSS analysts.

- 1. All Government-owned material is reportable per NUREG/BR-0006, Rev. 7, including all SNM, source material, and other materials listed in the Reportable Elements and Isotopes section of the NMMSS User's Guide.
- 2. For non-government-owned material, licensees are required to submit a Material Status Report (MSR) when their facilities:
 - Possessed, shipped, or received one gram (≥ 0.5 g) or more of SNM during the reporting period (see the table below); OR
 - Possessed, shipped, or received one kilogram (≥ 0.5 kg) or more of foreign obligated source material (natural uranium, depleted uranium, or thorium see the table below); OR
 - Imports or exports 1 kg (≥ 0.5 kg) or more of source material.
- 3. Fillable Forms 742 and 742C (recommended) are posted on the NMMSS website http://nnsa.energy.gov/aboutus/ourprograms/nuclearsecurity/nmmsshome/nmmssinfo/doenrcforms
 - The forms are also posted on the NRC website http://www.nrc.gov/reading-rm/doc-collections/forms

Material	Material Type	Reporting Unit (rounded up)	Weight that is Reported
Enriched uranium*	20	Whole gram	Element and isotope
Plutonium	50	Whole gram	Element and isotope
Uranium-233	70	Whole gram	Element and isotope
Plutonium-238	83	Tenth of a gram	Element and isotope
Depleted uranium	10	Whole kilogram	Element and isotope
Normal uranium	81	Whole kilogram	Element only
Thorium	88	Whole kilogram	Element only

^{*}Assay Levels of Enriched Uranium (from NUREG/BR-0007, Rev. 6)

Report enriched uranium by assay level (see below) on separate MBR forms.

- **E-1** Greater than normal but less than 5%
- **E-2** 5% or more, but less than 20%
- E-3 20% or more, but less than 80%
- **E-4** 80% or more

For regulatory questions, please contact Brian Horn, NMMSS NRC Project Manager, at 301-287-9129, brian.horn@nrc.gov.

Thank You for a Job Well Done!

The annual reconciliation of all 49 DOE/NNSA site inventories was successfully completed. The September 2014 processing period was closed by NMMSS on December 1, 2014. The reconciliation process involves comparing a site's material balance for all accountable nuclear materials with the book values in NMMSS as of September 30. In addition, foreign-obligated material balances must be compared with the information on the NMMSS IA-OBL-05 Obligation Summary Report. Many DOE/NNSA sites' material balances perfectly matched those in NMMSS; a few needed adjustments and clarifications. The DOE/NNSA sites provided quick and detailed responses to questions and information requests on the physical inventory listings and adjustments that were submitted so that the NMMSS staff could address and resolve any outstanding issues.

In addition, the NMMSS staff collected information from 39 DOE/NNSA sites following the September 2014 closing to update project numbers for FY 2015. Project numbers, which are tied to the DOE budget and reporting codes, provide important financial reporting, program ownership, and materials management information about DOE-owned nuclear materials in use at government and private-sector sites throughout the U.S. and in foreign countries.

The NMMSS program appreciates the support and cooperation received to assist in the completion of these critical annual milestones.

Upcoming NMMSS Training Courses for NRC

NMMSS training for NRC licensees and Federal employees is scheduled for March 24-26, 2015, and July 14-16, 2015 at DOE Headquarters in Germantown, MD. This course is designed for individuals with limited experience in NRC reporting requirements or those who need a refresher. The course content is based on NUREG/BR-0006, Rev. 7 and NUREG/BR-0007, Rev. 6. The following topics, among others, will be included:

- Completion of data forms: transactions, inventory, and material balance;
- Inventory reconciliation;
- Foreign obligations reporting; and
- Report products.

The desired class size is 10 or less. A minimum of 6 is required to conduct the class. You may register for the class by contacting John Ballard at (301) 903-0092, or by email at John.Ballard@nnsa.doe.gov, and providing him with your name, nationality, job title, facility name, address, telephone number, and email address. Due to security requirements for entering the DOE Germantown facility, all potential students who are not U.S. citizens MUST register for this workshop at least 45 days prior to the instruction dates. There are no training fees for this course.

If interested, please contact John Ballard by March 10, 2015 or July 1, 2015.

Upcoming NMMSS II Training Course for DOE

The DOE NMMSS II (MCA-212) training course has been scheduled for June 9-11, 2015, at Pantex Plant, in Amarillo, TX. It is a follow-up to NMMSS I and addresses topics and report products associated with nuclear materials accounting as they apply to NMMSS. Participants are also encouraged to share NMMSS-related issues and potential problems they may currently be experiencing. The NMMSS I course (MCA-112) is the prerequisite for the NMMSS II workshop.

The desired class size is 12 or less. A minimum of 6 is required to conduct the class. You may register for the class by contacting John Ballard at (301) 903-0092, or by email at John.Ballard@nnsa.doe.gov, and providing him with your name, nationality, job title, facility name, address, telephone number, and email address. Students must also register for the class with the NTC at https://ntc.doe.gov/default.aspx. There are no training fees for this course.

If interested, please contact John Ballard by May 30, 2015.

Upcoming NMMSS I Training Courses for DOE

The DOE NMMSS I (MCA-112) training course has been scheduled for **September 15-18**, **2015**, at DOE Headquarters in Germantown, MD. This course is designed for personnel who have less than two years' experience in nuclear materials accounting.

The desired class size is 12 or less. A minimum of 6 is required to conduct the class. You may register for the class by contacting John Ballard at (301) 903-0092, or by email at John.Ballard@nnsa.doe.gov, and providing him with your name, nationality, job title, facility name, address, telephone number, and email address. Students must also register for the class with the National Training Center (NTC) at https://ntc.doe.gov/default.aspx. There are no training fees for DOE personnel or DOE contractors.

If interested, please contact John Ballard by August 31, 2015.





Imports and Exports: Did You Know?

Licensee transactions involving source material are normally not required to be reported on DOE/NRC Form 741, *Nuclear Material Transaction Report*. However, 10 CFR Part 40.64 requires that NRC licensees *report all imports and exports of 1 kg or more* of uranium and thorium source material on DOE/NRC Form 741. Please be sure to report imports and exports. The NMMSS staff uses this information to fulfill the United States Government's monthly reporting commitments to the International Atomic Energy Agency (IAEA) every month.

Important Information Regarding URENCO USA (RIS YKO)

Effective December 11, 2014, URENCO USA has changed its RIS from YKO to YK1. All shipments involving URENCO USA should henceforth reference the new RIS YK1. The license numbers and other information remain unchanged. Please contact Ms. Carol Wormington at URENCO USA with any questions by telephone at 575-394-6523 or by e-mail at carol.wormington@urenco.com.

NRC and Safeguards Information (SGI)

In late 2006, industry sent a number of questions to our NRC point of contact for NMMSS, Brian Horn, concerning data submission to NMMSS and whether such reports are "Safeguards Information" as defined by the NRC. An article was prepared and published in the January/February 2007 edition of the NMMSS Newsletter that provided NRC guidance.

In response to similar recent inquiries from industry, Brian has checked with NRC experts and they have confirmed that the following response and guidance is still valid today.

Dear Brian:

Thank you for bringing the issue of industry reporting information to the Nuclear Materials Management and Safeguards System (NMMSS) data base and whether the data of spent fuel movements is "Safeguards Information" as defined by the NRC. As you are aware, the NRC regulations are located at 10 CFR 73.21. I have discussed your questions with my colleagues and we have prepared the following information which we hope answers the questions.

- Industry reports to NMMSS concerning movements of spent fuel from the reactor core to the spent fuel pool are not Safeguards Information.
- Industry reports to NMMSS concerning movements of spent fuel from the spent fuel pool to on-site dry storage location are not Safeguards information.
- Regarding industry reports to NMMSS concerning movements of spent fuel (from the pool or dry storage locations) to
 another site. If such a report to NMMSS is not submitted until the day after the spent fuel shipment, then the information
 is not Safeguards information. However, if the site submits the data to NMMSS any time earlier, then the NMMSS data
 is Safeguards Information.
- Industry reports to NMMSS summarizing the quantity of nuclear material at a reactor site (in the core, in the spent fuel
 pool, in dry storage, etc.) are not Safeguards information.

Sincerely, Bern Stapleton Senior Program Manager Safeguards Information Nuclear Regulatory Commission

Brian Horn prepared this article and asked that any questions concerning the above information be directed to him. Brian's telephone number is 301-287-9129.



A-M Transaction: When Should I Enter One?

The NMMSS system allows users to enter one-party transactions or adjustments using the action code M. The NRC's NUREG/BR-0006, Rev. 7, *Instructions for Completing Nuclear Material Transaction Reports*, states that A-M transactions are used for "...reporting a one-party transaction or an adjustment to a one-party transaction (i.e., an onsite gain or loss of material as the result of burnup, production, measured discards, etc.)." This type of transaction typically involves small quantities of nuclear material.

Do not use A-M transactions to document:

- an import of a reportable quantity of nuclear material;
- an export of a reportable quantity of nuclear material;
- a shipment of a reportable quantity of nuclear material to a facility without a valid reporting identification symbol (RIS); or
- a receipt of a reportable quantity of nuclear material from a facility without a valid RIS.

For example, there have been cases where a number of transactions were combined into one A-M transaction, which caused difficulties in tracking specific shipments.

The spurious use of A-M transactions hinders the NMMSS staff's ability to locate shipments of nuclear materials and, ultimately, complete facility reconciliations. Please contact a NMMSS staff member if you have any questions on A-M transactions.

NMMSS Website Updates

- NMMSS Users Meeting 2015: http://nnsa.energy.gov/aboutus/ourprograms/nuclearsecurity/nmmsshome
- Updated DOE/NRC Forms 740M, 741,742, and 742C, both PDF and fillable PDF:
 http://nnsa.energy.gov/aboutus/ourprograms/nuclearsecurity/nmmsshome/nmmssinfo/doenrcforms

http://nnsa.energy.gov/aboutus/ourprograms/nuclearsecurity/nmmsshome/nmmssinfo/fillableforms

Schedule of Upcoming Training in 2015 and 2016:
 http://nnsa.energy.gov/sites/default/files/nnsa/inlinefiles/Upcoming%20NMMSS%20Training%20March%202015-2016.pdf

Transaction/Inventory Due Dates for DOE Sites

Reporting Month	Transaction Due	Inventory Due
February 2015	March 10	March 16
March 2015	April 10	April 15
April 2015	May 11	May 15
May 2015	June 10	June 15
June 2015	July 10	July 15
July 2015	August 10	August 17
August 2015	September 10	September 15
September 2015	October 13	October 15

Upcoming 2015 Observed Holidays

Memorial Day	Monday, May 25	
Independence Day (observed)	Friday, July 3	
Labor Day	Monday, September 7	
Columbus Day	Monday, October 12	
Veterans Day	Wednesday, November 11	
Thanksgiving Day	Thursday, November 26	
Christmas Day	Friday, December 25	



Updated NMMSS Points of Contact For Nuclear Material Reporting Technical Support and Assistance

Name	Topic	Phone	Email Address
Karen Antizzo	Data Submission NMMSS Reports IAEA	(301) 903-0872	Karen.Antizzo@nnsa.doe.gov
John Ballard	DOE/NNSA Reconciliation Training	(301) 903-0092	John.Ballard@nnsa.doe.gov
Elaine Beacom	International Reporting	(301) 903-1328	Elaine.Beacom@nnsa.doe.gov
Carl Berger	Special Requests	(301) 903-3656	Carl.Berger@nnsa.doe.gov
Mitch Hembree	Foreign Obligations	(301) 903-6299	Mitch.Hembree@nnsa.doe.gov
Gary Hirsch	NRC Reconciliation	(301) 903-6870	Gary.Hirsch@nnsa.doe.gov
Mark Huffman	NRC Reconciliation	(301) 903-0236	Mark.Huffman@nnsa.doe.gov
Mary McConnell	NRC Reconciliation	(301) 903-6240	Mary.McConnell@nnsa.doe.gov

Department of Energy
Peter Dessaules (301) 903-4525
Pete.Dessaules@nnsa.doe.gov

Nuclear Regulatory Commission Brian Horn (301) 287-9129 Brian.Horn@nrc.gov

DOE International POC
James Crabtree (301) 903-6008
James.Crabtree@nnsa.doe.gov

NRC International POC Santiago Aguilar (301) 287-9136 Santiago.Aguilar@nrc.gov

Homepage: http://nnsa.energy.gov/nmmss
Email: NMMSS@nnsa.doe.gov
Unclassified Fax: (301) 903-1998

Unclassified/Overnight Surface Mailing Addresses

Unclassified

Karen Antizzo

NMMSS Program, NA-532/Germantown Bldg. U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585-1290

Overnight - Unclassified

Karen Antizzo

Attn: NMMSS Program, NA-532 U.S. Department of Energy 19901 Germantown Road Germantown, MD 20874-1207

Classified

The NMMSS classified mailing address is available on the Safeguards and Security Information Management System (SSIMS) or by calling a NMMSS analyst. Identify Karen Antizzo as the recipient and NA-532 as the organization.

IMPORTANT: The "DO NOT X-RAY" marking does not prevent incoming packages from being sanitized. Please package compact discs (CDs) in cardboard rather than plastic casings. The plastic is heated by the sanitization machine, thereby warping the CD. There is less chance of this occurring if the CD is packaged in cardboard.

For information on transmitting classified data to NMMSS electronically, contact Jim Crabtree, (301) 903-6008 or James.Crabtree@nnsa.doe.gov.

NMMSS News is sponsored by the Department of Energy (POC: Pete Dessaules; Pete-Dessaules@nnsa.doe.gov, (301) 903-4525) and the Nuclear Regulatory Commission (POC: Brian Horn; Brian.Horn@nrc.gov, (301) 287-9129). Please provide feedback or suggested topics of interest to Karen Antizzo at Karen.Antizzo@nnsa.doe.gov, (301) 903-0872.